Ref: 71C – Caustic Soda – 220805

CAUSTIC SODA
SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY:

Product Name: CAUSTIC SODA
Applications: Drain Cleaner
Supplier: Palace Chemicals Ltd; Speke Hall Industrial Estate; Speke; Liverpool; L24 4AB
Tel: 0151 486 6101; Fax 0151 448 1982
e-mail: sales@palacechemicals.co.uk; web: www.palacechemicals.co.uk

2. COMPOSITION / INFORMATION ON INGREDIENTS:

Ingredients: Sodium Hydroxide (>99.0 %w/w) – CAS No. 1310-73-2
Sodium Carbonate (< 1.0% w/w)
Hazardous components: As above

3. HAZARDS IDENTIFICATION:

Classification: CORROSIVE
Risk Phrases: Causes Severe Burns

4. FIRST AID MEASURES:

Inhalation: Avoid working in a poorly ventilated, confined space. Remove to fresh air and rest. If irritation or breathing difficulties persist, seek medical attention. Do not use mouth to mouth ventilation. Obtain immediate medical assistance.

Skin contact: Wash off skin immediately with water. Remove contaminated clothing and launder regularly. Where irritation to skin is apparent seek prompt medical attention.

Ingestion: Clean out mouth with copious volumes of water and drink plenty. Do not induce vomiting. Beware of aspiration if vomiting occurs. Seek prompt medical attention and show this data sheet.

Eye contact: Irrigate thoroughly for 15 minutes with clean running water or a boric saline eye wash bottle. Seek immediate medical attention & remove any particles with a cotton wool bud.

5. FIRE FIGHTING MEASURES:

Extinguishers: Do not use water as this will generate heat & steam on contact with caustic pearl.

Combustion products: May attack metals liberating hydrogen gas. Steam liberated on contact with water will produce noxious, irritating fumes.

Special procedures: Fire fighter should wear full protective clothing and self-contained breathing apparatus with support of chemical shower facilities for immediate wash down after contact.

6. ACCIDENTAL RELEASE MEASURES:

Personal protection: Wear impermeable PVC overalls, aprons, rubber boots and supply respiratory protective equipment when there is a risk of noxious vapours due to high temperatures.

Environmental protection: Sweep up dry granules into sealable containers and then wash away fine residues with excess volumes of water ensuring complete and effective dilution.

Spill removal methods: Avoid contact with water onto dry granules and contain dry residues in clearly marked containers for specialist disposal according to local authority regulations for corrosive solids.

7. HANDLING & STORAGE:

Handling precautions: Use in well ventilated areas. Avoid handling dust or granules. Always avoid contact with skin & eyes and ensure nearby provision of shower and eye wash equipment in the event of accidental contact.

Storage precautions: Store in well-sealed, clearly marked containers. Keep out of reach of children in a cool, dry & well-ventilated environment preferably within a lockable metal cabinet. Avoid storage outdoors or where there is a risk of contact with moisture or excessive humidity.

Usage precautions: Use only in accordance with instructions shown on the container and do not transfer contents to secondary containers made from zinc, tin or aluminium or any associated alloys.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION:

Exposure limits: Occupational exposure limit – 2mg/M3 10 min STEL for Sodium hydroxide

Process controls: Use process enclosures and engineering containment whenever possible. Where user operations generate dust the installation of local exhaust ventilation is essential.

Personal protection: Wear impermeable PVC overalls, aprons, rubber boots and supply respiratory protective equipment when there is a risk of noxious vapours due to high temperatures.
Chemical goggles to BS 2092 Goggles should be worn for all applications to help prevent accidental face/eye contact. Hand protection is advised by wearing 17" long elbow length heavy duty natural rubber gloves or gauntlets approved to EN 374 & EN 420 with a BTT rating of > 8 hrs for 50% caustic sol'n. A disposable PVC apron should be worn on top of overalls, however if the fabric becomes contaminated these should be laundered immediately.

9. PHYSICAL & CHEMICAL PROPERTIES:

Appearance:	White pearl granules	**Vapour pressure:**	N/A
Colour:	white	**Evaporation rate:**	N/A
Density / SG:	n/a	**Viscosity:**	80Cp in a 50% sol'n @ 20'C
Solubility:	Exothermically in water	**Boiling point:**	N/A
Melting point:	318'C	**Flammability limits:**	N/A
Auto ignition Temp:	N/A	**Oxidising properties:**	Contact with metals liberates hydrogen gas

10. STABILITY & REACTIVITY:

Conditions to avoid: Exposure to air, water, oxygen or metals.

Materials to avoid: Strong acids, ammonium salts, tin, zinc, aluminium, halogenated solvents, nitroalkanes and oxidising agents

Decomposition products: Hydrogen gas with metals and steam on exothermic dissolution

11. TOXICOLOGICAL INFORMATION:

Routes of exposure:	Skin, eye & inhalation	**Corrosivity / Irritation:**	Extremely hazardous Causes burns
Acute short term effects:	Burns & severe irritation	**Sensitisation:**	With prolonged contact
Chronic long term effects	Sever skin damage & dermatitis	**Mutagenicity:**	n/a
Toxic dose -LD 50:	40mg / kg in a mouse 5gm in man	**Carcinogenicity:**	n/a
Prolonged exposure effects:	Local skin destruction & damage to respiratory functions.	**Reproductive toxicity:**	n/a

12. ECOLOGICAL INFORMATION:

Ecotoxicity: High concentrations will injure aquatic life due to high PH level.

Bio-accumulative potential: Nil

Persistence & degradability: Alkalinity diminishes with dilution & contact with low Ph environments.

13. DISPOSAL CONSIDERATION:

Disposal Methods: Dried residues can remain corrosive when re-wet. Unused product and freshly contaminated application materials must be considered harmful and disposed of in accordance with local authority regulations for alkali liquids and solids.

Special requirements:

Regulatory controls:

14. TRANSPORT INFORMATION:

Proper shipping name:	SODIUM HYDROXIDE SOLID		
ADR Class No.:	8	**Flash point:**	N/A
UN No.	1823	**IMDG Class:**	8
ADR Packing Group:	II	**IMDG Pack group:**	II
Hazchem Code:	80	**Marine pollutant:**	NO

15. REGULATORY INFORMATION:

Classification: **CORROSIVE**

CORROSIVE

Risk phrases: R35: Causes severe burns

Safety phrases: Keep locked up & out of reach of children
In case of contact with eyes, rinse immediately with plenty of water & seek medical advice.
Wear suitable gloves & eye/face protection.
In case of accident or if you feel unwell, seek medical advice and show container / label

UK Regulatory references: CHIP III; EU Directives 67/548/EEC and 88/379/EEC
Dangerous substances Directive

16. OTHER INFORMATION:

Last revision date: 22-08-05

SDS No.: 71C

Data sources: Supplier safety data sheets; Croner up-dates; Vol VII of the Approved Supply list; EH 40.

Disclaimer: The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work. This data sheet complies with EC Directive 91/155EC.